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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,144	01/03/2002	Kevin J. Low	5814-56	9388

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EXAMINER

TRAN, HIEN THI

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/040,144	LOW ET AL.	
	Examiner	Art Unit	
	Hien Tran	1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 8-19 and 22-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 20, 21 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-25 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-7, 20-21, 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, lines 4-5 it is unclear as to where the phrase of "integrally formed with the support is disclosed in the instant specification. See claims 3, 5-6, 20, 25 likewise.

In claim 2, it is unclear as to what applicants are attempting to recite, the preamble only recites a retainer and apparently the "element" is not part of the retainer.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Epelman (3,556,735).

Epelman discloses an apparatus comprising: a support 1; a plurality of members 4', 4", etc. extending from the support, each member spaced apart from the next member and defining

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an abutment surface; and wherein the abutment surface defines a bearing surface adapted to engage the element, the aspect ratio (width/thickness) reads on the members 4, 4" (Fig. 1).

With respect to the newly added phrase of "integrally formed", it has been held that the phrase of "integrally" is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973).

Accordingly, instant claims 1-5 structurally read on the apparatus of Epelman.

5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Lankenau et al (3,913,890).

Lankenau et al discloses an apparatus comprising: a support 10; a plurality of members 25 extending from the support, each member spaced apart from the next member and defining an abutment surface; and wherein the abutment surface defines a bearing surface adapted to engage the element, the aspect ratio (width/thickness) reads on the members 25 (Fig. 3).

With respect to the newly added phrase of "integrally formed", it has been held that the phrase of "integrally" is sufficiently broad to embrace constructions united by such means as fastening and welding. *In re Hotte*, 177 USPQ 326, 328 (CCPA 1973).

Accordingly, instant claims 1-5 structurally read on the apparatus of Lankenau et al.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1-5, 20-21, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jurgensmeyer (5,788,729)

Jurgensmeyer discloses an apparatus comprising: a support 35, 36; a plurality of members 52 extending across the supports, each member spaced apart from the next member and defining an abutment surface; and wherein the abutment surface defines a bearing surface adapted to engage the element, the aspect ratio (width/thickness) reads on the members 52 (Fig. 2, col. 2, line 7 to col. 3, line 47).

The apparatus of Jurgensmeyer is substantially the same as that of the instant claims, but fails to disclose whether the member may be integrally formed with the support.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to integrally form the support and the member on the basis of its suitability for the intended use as a matter of obvious design choice, and since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

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9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jurgensmeyer (5,788,729) or Epelman (3,556,735) or Lankenau et al (3,913,890).

The apparatus of Jurgensmeyer or Epelman or Lankenau et al is substantially the same as that of the instant claim, but fails to disclose provision of aerodynamic orientation of the members.

However, the specific orientation of the member (angle with respect to the support) is not considered to confer patentability to the claim. The precise angle of the member would have been considered a result effective variable by one having ordinary skill in the art. As such, without more, the claimed orientation cannot be considered "critical". Accordingly, one having ordinary skill in the art would have routinely optimized the angle of member in the system to obtain the desired benefits attendant therewith (*In re Boesch*, 617 F.2d. 272, 205 USPQ 215 (CCPA 1980)), and since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (*In re Aller*, 105 USPQ 233).

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jurgensmeyer (5,788,729) in view of Gebert et al (4,422,790).

The apparatus of Jurgensmeyer is substantially the same as that of the instant claim, but fails to disclose provision of a housing with a hinge.

However, Gebert et al shows the conventionality of providing a housing for the filter element having a hinge.

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It would have been obvious to one having ordinary skill in the art to provide a housing with a hinge as taught by Gebert et al in the apparatus of Jurgensmeyer to facilitate the insertion and removal of the filter element thereof.

Response to Arguments

11. Applicant's arguments filed 5/10/04 have been fully considered but they are not persuasive.

Applicants argue that the members of the instant claims are spaced apart transverse to the direction of flow, not longitudinally along the direction of flow as in Jurgensmeyer, Lankenau and Epelman. Such contention is not persuasive as the language of the instant claims is not commensurate in scope with such argument. Furthermore the members in Jurgensmeyer, Lankenau and Epelman are spaced apart transverse to the direction of flow. It is unclear as to where Jurgensmeyer, Lankenau and Epelman disclose that the members are spaced longitudinally along the flow direction.

Applicants argue that the support of the instant invention is not a shell or inner cage and the extended members are not fastened to bolt or tie rods or cross bars as in Epelman or Lankenau. Such contention is not persuasive as the language of the instant claims does not preclude such shell support and fastened means of Epelman and Lankenau.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (571) 272-1454. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hien Tran

**Hien Tran
Primary Examiner
Art Unit 1764**

HT
July 20, 2004